

Title (en)

SYSTEM AND METHOD FOR OBJECT RECOGNITION USING THREE DIMENSIONAL MAPPING TOOLS IN A COMPUTER VISION APPLICATION

Title (de)

SYSTEM UND VERFAHREN ZUR OBJEKTERKENNUNG UNTER VERWENDUNG DREIDIMENSIONALER ABBILDUNGSWERKZEUGE IN EINER COMPUTERSICHTANWENDUNG

Title (fr)

SYSTÈME ET PROCÉDÉ DE RECONNAISSANCE D'OBJETS UTILISANT DES OUTILS DE MAPPAGE TRIDIMENSIONNELS DANS UNE APPLICATION DE VISION ARTIFICIELLE

Publication

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Application

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Abstract (en)

[origin: WO2020245441A1] The present invention refers to a system and a method for object recognition via a computer vision application, the system comprising at least the following components: - an object (130, 130') to be recognized, the object having object specific reflectance and luminescence spectral patterns, - a light source (110, 110') which is configured to project at least one light pattern on a scene (140, 140') which includes the object to be recognized, - a sensor (120, 121, 120') which is configured to measure radiance data of the scene including the object when the scene is illuminated by the light source, - a data storage unit which comprises luminescence spectral patterns together with appropriately assigned respective objects, - a data processing unit which is configured to detect the object specific luminescence spectral pattern of the object to be recognized out of the radiance data of the scene (140, 140') and to match the detected object specific luminescence spectral pattern with the luminescence spectral patterns stored in the data storage unit, and to identify a best matching luminescence spectral pattern and, thus, its assigned object, and calculate a distance, a shape, a depth and/or surface information of the identified object (130, 130') in the scene (140, 140') by reflectance characteristics measured by the sensor (120, 121, 120').

IPC 8 full level

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Citation (search report)

See references of WO 2020245441A1

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